

Abstract

A non-circular sprocket component comprises a rotor (11) having a plurality of teeth (16) arranged around the perimeter of the rotor, each tooth having a crown (9), and each pair of adjacent teeth having a valley (8) therebetween. The crowns of the teeth lie on a curved envelope forming the perimeter of the motor. The perimeter has a non-circular profile having at least two protruding portions (22, 23) alternating with receding portions (24, 25). The distance between the midpoints (V) of the crowns (9) of each pair of adjacent teeth is substantially the same. The profile of the valley (8) between each pair of adjacent teeth is substantially the same. The distance between the midpoint (V), of each crown (9) and the axis (A) of the rotor varies around the perimeter to produce the said non-circular profile.